

ABSTRACT OF THE DISCLOSURE

The lead-free and preferably arsenic-free optical glass is suitable for applications in the fields of imaging, projection, telecommunications, optical communication technology and/or laser technology, and has a refractive index n_d of $1.55 \leq n_d \leq 1.60$, an Abbe number v_d of $54 \leq v_d \leq 63$ and a transformation temperature $T_g \leq 500^\circ\text{C}$. This optical glass has good production and processing properties and crystallization stability, and, at the same time, advantageously does not contain PbO and As_2O_3 . These glasses contain, in percent by weight based on oxide content: P_2O_5 , 43 – 56; ZnO , 21 – 36; Al_2O_3 , 0 – 6; Na_2O , 0 – 16; K_2O , 0 – 8; $\Sigma \text{M}_2\text{O} \leq 16$; MgO , 0 – 5; CaO , 0 – 5; BaO , 3 – 14; B_2O_3 , 0 – 8; La_2O_3 , 0 – 7. In addition, it may also contain standard refining agents.